N.B..
Govt. P.

Annual Report

1967

New Brunswick Industrial Safety Council

+1

NEW BRUNSWICK
INDUSTRIAL SAFETY COUNCIL

FREDERICTON, NEW BRUNSWICK

The Honourable H. H. Williamson
Minister of Labour
Province of New Brunswick

Dear Sir:

In this Fifth Annual Report, the New Brunswick Industrial Safety Council attempts to present the progressive approach of our Council in implementing newer methods as well as extending the proven ones for safety awareness in industry through safety education, promotion and statistical research.

Our report shows increased field activities this year, which becomes significant as evidenced by the increased interest and participation by both management and employees in safety programs this year.

The announced decrease in assessment of over one million dollars by the Workmen's Compensation Board in the coming year further gives credence to the results of efforts by the Industrial Safety Council, in cooperation with relative efforts by the Workmen's Compensation Board and the Technical Services Branch of the Department of Labour.

A study in statistical development of injury records in the Province and a method of utilizing their direction to best advantage in correlating the efforts of our field training is presently being carried out. Also our field training program is being studied in depth by an outside agency to ensure we are using the best tools available in our work. While we are already rated high in our field in Canada in the areas of statistics, training and promotion we feel that an attitude of continuous outreaching for the most up-to-date and effective means available must be our working aim.

It is encouraging to note an increasing interest by management and labour organizations in the value of safety awareness evolving in the past two or three years. This overcoming of a natural and widespread apathy is a very necessary and eventual step to our ultimate goal of injury elimination in industry.

I wish to compliment the staff of the New Brunswick Industrial Safety Council for their tireless efforts expended on behalf of safety education, and the members of the Council for their continued support and valued guidance.

On behalf of the Council I extend our sincere thanks to the Department of Labour, the New Brunswick Workmen's Compensation Board and the Department of Finance for their valuable cooperation.

Respectfully submitted,

H. S. HOWCROFT
Chairman

NEW BRUNSWICK INDUSTRIAL SAFETY COUNCIL

ANNUAL REPORT 1967

The New Brunswick Industrial Safety Council in 1967 experienced a year of some further growth and we trust that its operation has contributed substantially to lessen injuries and fatalities in industry in the Province during the year.

The regular Council met in session four times during the year and Executive committee held 10 meetings. Membership at December 31, 1967:

Representing Labour	**Address**	**Industrial Class**
T. M. McCarthy	Red Bank	*Mining*
Aurele Ferlatte	Dalhousie	*Forest Products*
Edwin Booth	Lewisville	*Manufacturing*
Leo McCluskey	Saint John	*Construction*
D. W. MacKenzie	Moncton	*Transportation*
Representing Management		
Douglas Flower	Minto	*Mining*
J. R. Miller	Bathurst	*Forest Products & C. M. A.*
H. S. Howcroft *(Chairman)*	Fredericton	*Manufacturing*
Paul Levesque	Fredericton	*Construction*
F. E. Daniels	Saint John	*Transportation*
Representing Government		
R. G. Jones	Saint John	*Workmen's Compensation Boara*
R. P. Campbell	Fredericton	*Department of Labour*
Dr. C. W. Kelly	Fredericton	*Department of Health*
R. W. Warren	Fredericton	*Department of Natural Resources*
H. E. Briggs *(Executive Director)*	Fredericton	*N. B. Industrial Safety Council*

STAFF

The following changes occurred in staff during 1967:

Harland E. Briggs was appointed Executive Director by the Minister of Labour on January 10, 1967, replacing G. W. Crandlemire who resigned effective December 31st, 1966, to accept a position with the Federal Department of Manpower and Immigration in Halifax.

In May, Paul Janssens commenced employment with the Council as Promotional Supervisor, filling a position which had been vacant for a number of months.

V. L. Buckley, field representative in the Fredericton area, was promoted to the newly created position of Field Staff and Training Supervisor, effective October 1, 1967.

STAFF TRAINING

In up-grading the qualifications of field staff, a number of special courses and seminars were attended. These included:

A new safety leadership course, "The Principles of Safety and the Safety System", based on the Neil George Method was studied and adapted for the specific needs of industry in our Province. This course is particularly valuable for training supervisory people. Our field representatives along with representatives of the New Brunswick Forest Industries Safety Association Inc. were trained in this course during the week of March 28-31. Supporting cards have meanwhile been printed and carrying cases supplied to make this a compact tool in the field. We have developed the text of this course in both English and French, and foresee the continuing development of programs of this nature as two-language courses in the future.

A First Air Course was conducted for the field staff at our office in February. G. H. Bovaird, who is a qualified instructor through St. John Ambulance, acted as instructor. This course brought the standing of our field staff to two at voucher level and four at medallion and first label.

One of our staff successfully completed the Driver Improvement Course for Instructors, as conducted by the Transportation Safety Association of Ontario, and one member completed a French language course.

One of our field representatives attended and participated in the program of the Atlantic Branch, Canadian Pulp and Paper Association meeting on "Safety" held in Liverpool, Nova Scotia, in May.

Our Council was represented at the following seminars or conferences: Mines Accident Prevention Association of Ontario general meeting and technical sessions in Toronto; Quebec Pulp and Paper Safety Association Convention; Maine State Safety Conference in Portland; Fifth Conference on Health and Safety in London, Ontario, sponsored by the Canadian Labour Congress; National Safety Congress in Chicago; Canadian Industrial Safety Association annual meeting in Toronto; "Creative Problem Solving" seminar sponsored by the New Brunswick Research and Productivity Council; and Safety Legislation Seminar sponsored by the Technical Services Branch of the New Brunswick Department of Labour.

In addition, field staff meetings were held each month. This proved an effective means of bringing the field representatives together for training and keeping them informed of changes and developments in various aspects of their field work. Along with regular routine agendas for these meetings, outside speakers were obtained and such subjects as field work in other provinces, protective clothing, eye protection, audio-visual services, etc., were covered.

FIELD PROGRAM AND SERVICES

Another active year has been accomplished in our field work program. This being the first year we operated with a full staff of seven trained and experienced field representatives, we were able to enlarge considerably our number of meetings held and people contacted in all areas of the Province. This resulted in 265 management meetings held with an attendance of slightly more than 2,800. A total of 571 employee meetings were conducted with an attendance of 15,600. Also 4,000 contact calls were made on employers. Our safety training films were widely used with 819 showings to a total audience of 26,400 people.

Our field representatives participated in the program of Labour schools sponsored by the Canadian Labour Congress at Fredericton, Edmundston, Newcastle and Saint John. At each school, one-half day was allotted to industrial safety.

101-05184/

Again during 1967 we assisted the staff of the Technical Institutes and various trade and vocational schools in the Province in the training of their students in the fundamentals of safety. Safety instruction was also provided during various apprenticeship training programs.

A typical Council Training session is seen above with three field representatives and the Council's Training Supervisor, Vince Buckley, participating. From, left to right, are: Glen Higgins, Gar Bovaird, Vince Buckley, and Don Gruchy.

Other activities included the participation in the presentation of numerous "Gold Cap" awards and "Wise Owl Club" awards; a safety display booth set up in the New Brunswick Federation of Labour Annual Convention showing the role of the Council and the services available. Nine demonstrations were conducted dealing with the origin of fire, stressing electrical and gasoline hazards and other contributory causes of fire.

A new general training course (Neil George Method) was adapted for field use this year to supplement the Lateiner Method. This is being used in both English and French versions.

A program of three-week projected planning by each field representative in his area, along with a more simplified method of weekly reporting was found to be helpful in maintaining an active field schedule.

To further develop the effectiveness of our field staff, a specialized study of our field training courses and methods is presently being carried out.

PROMOTIONAL MEDIA

The year 1967 saw an expansion in safety promotion through the mass media and other means of communication for promotion of industrial safety in the Province.

Radio played the greatest role as an average of 1,500 safety messages were aired per month on New Brunswick radio stations in 1967. The messages were changed periodically to provide diversity and variety to the listener. A new method was employed whereby messages were prepared containing short interviews with workers who were saved from serious or fatal injury by wearing protective equipment.

A radio program entitled, "Safely Speaking", was inaugerated through CBC Fredericton covering the entire Province on the CBC New Brunswick network and provided safety information and messages to the listening public. In addition, air time was purchased via the CBC during the Sunday night NHL hockey broadcast providing us with a predominently male audience.

French messages were included in our coverage through CBAF Moncton, CHNC New Carlysle, Quebec, and CJEM Edmundston.

Television coverage was stepped up to include 170 messages on English stations, and 150 messages in the French language during 1967. We are indebted to the French television stations in Carleton, Quebec and Moncton for providing such excellent coverage.

An estimated 10,000 English posters and 6,000 pamphlets were distributed by our field representatives and various safety supervisors across the Province. Added to this were an estimated 3,000 French posters and 2,000 French pamphlets for the French speaking section of the industrial force.

Six new films were added to the library of promotional films for television, and a number of slides were designed for English and French television broadcasting. New signs, banners, and placards depicting the Council motto were developed and promotional material including matches, bumper stickers, and place mats were used extensively.

Newspaper coverage in 1967 was increased with a large number of articles and pictures used by the three daily newspapers and the various weeklies in the Province.

The annual conference was another source of promotion in 1967 via the mass media, newsletters, correspondence and a good promotional job by the field representatives.

Six newsletters were printed in 1967 depicting various functions and projects of the Council. Pictures, sketches, and drawings were used in various issues and an attempt was made to cover all facets of industrial safety. A large number of short safety messages were utilized to attempt to reach the employer and employee alike.

A set of four fatality reports was made up which proved to be popular as we received many requests for additional copies. The reports detailed actual fatalities in the Province.

The slogan, "Your Future is in Your Hands — Work Safely!" was retained for 1967 and the Council has accepted a recommendation to continue its use for a period of at least three or four years. This facilitates more economical ordering of materials such as banners, placards, slides, films, posters, pamphlets, matches, place mats and other promotional material.

CONVENTION

Our fourth annual safety convention was held at the Lord Beaverbrook Hotel, Fredericton, N. B., on April 27 and 28, 1967.

Winners of the Province of New Brunswick Safety Awards are shown above with their respective trophies. Seen, left to right, are: Ottis Logue, Associated Designers and Inspectors; Jack Filyer, Canadian National Railways, Assistant Superintendant of C. N. Telegraphs; D. M. Grouse, personnel manager of T. Eaton (Maritimes) Ltd.; and Ernest Morehouse, Department of Natural Resources; presented with Silver Cup.

Both days' sessions were lead off by the keynote speaker, L. H. Lorrain, First Vice-president and Canadian Director of the International Brotherhood of Pulp, Sulphite and Paper Mill Workers. Other program participants included: L. G. Bastin, President of the New Brunswick Safety Association Inc.; J. L. Sisk, Director of Technical Services Branch of the Department of Labour; Burnell Steeves, Director of Safety for Modern Enterprises Ltd.; J. Harold Stafford, Regional Director of Education for the Canadian Labour Congress; Burton D. Colter, President of Diamond Construction (1961) Ltd.; Yvon Landry, representative of Quebec Pulp and Paper Safety Association Inc.; R. Lidstone, Mine Superintendent, Cominco Ltd.; D. R. Hawker of Standard Chemicals Ltd.; W. R. Chastain, Pittsburgh Plate Glass Co.; R. G. Jones, Chairman of the Workmen's Compensation Board; and Dr. L. E. Bashow, Medical Director of Ridgewood Rehabilitation Centre.

The highlight of the annual banquet was the presentation of the Province of New Brunswick Safety Trophies for the best safety record in each of three groups.
Group I (over 800,000 man-hours) The T. Eaton Co. Maritimes Ltd.
Group II (200,000-800,000 man-hours) Canadian National Railways
Group III (60,000-200,000 man-hours) Associated Designers and Inspectors

Many informal chats took place among officials and delegates at the Council's fourth annual conference in Fredericton. The above photo shows, Council Chairman, H. S. Howcroft, inspecting a Gold Cap along with Hon. K. J. Webber, Minister of Labour, and Deputy-Mayor of Fredericton, Joe Scott.

On behalf of the Premier, the trophies were presented by Hon. K. J. Webber, Minister of Labour; Hon. Andre F. Richard, Minister of Public Works; and Hon. H. Graham Crocker, Chairman of the New Brunswick Electric Power Commission.

Nine exhibitors of safety equipment, protective clothing and first aid supplies, as well as displays from the Motor Vehicle Branch and the Workmen's Compensation Board and our Council display added much to the safety awareness atmosphere of the convention.

Keen interest was evident in those attending and we believe the delegates were able to take back to their companies or union a renewed interest in safety together with some constructive ideas to improve their safety record.

The 1968 conference is scheduled to be held at the Admiral Beatty Motor Hotel, Saint John, on May 6 and 7.

AWARDS

In the past, only those firms working over 60,000 man-hours per year have been eligible to compete for the three Province of New Brunswick Safety Trophies, thus no recognition has been given to the smaller firms. Our Council is considering an awards method whereby a certificate will be given to those firms in New Brunswick working under 60,000 man-hours per year who experienced accident-free periods, based on the calendar year. The following method will be used:

(a) A certificate for first 12-month period, with 2nd, 3rd, and 4th year seal;

(b) Upon completing five years, a Gold Certificate be presented with red seal with ribbon for the 6th, 7th, 8th, and 9th years;

(c) Upon reaching ten years a brass plaque with lapel pins or other suitable recognition for each employee on staff at the time of reaching ten years.

ROAD BUILDERS' CONTEST

Working closely with the New Brunswick Road Builders' Association, we were able to provide some assistance in planning and promoting the National Safety Contest. The official opening was held at the site of the Shediac Bypass with over 300 officials and workers attending. The Council provided the featured speaker, supporting handouts and promotional coverage on radio, TV and newspaper.

The contest, which ran August 7-31, was not considered a success because of a high frequency rate of 34.7 per cent with 402,913 man-hours reported by only fourteen firms. The Province placed seventh in the national contest.

A more successful venture by the Road Builders in 1967 was the inaugeration of a local contest which was divided into two classes. Top honours were won in Class one by Scott Wheaton Ltd. of Moncton and a plaque was presented by Mussens Ltd. of Fredericton. Class two honors were captured by Diamond Construction (1961) Ltd., and Tractors and Equipment Ltd. donated the winning plaque for that class.

A Gold Cap Award was presented at the opening of New Brunswick Roadbuilders' National Safety Contest to Bruce Leaman by H. E. Briggs, executive director of the Council, while the award-winner's parents look on. Shown, left to right, are: Mrs. Orville Leaman, Bruce Leaman, Orville Leaman, H. E. Briggs, and Bob Myles, president of the Roadbuilders.

We will continue to cooperate with this organization and feel that with more firms reporting, a more successful national contest will be achieved next year. Results of the local contest were very gratifying and we can expect this trend to continue.

GENERAL

We note with interest the efforts of the New Brunswick Safety Council, Inc., who formed themselves into an organization to promote safety in the Province, principally in the fields of traffic, home, school, and water. We wish them continued success in their efforts and assure them of our fullest cooperation in any way in which we can be of assistance.

We also welcome the opening of a Federal Department of Labour Regional Office in Fredericton, with Mr. S. M. Bancroft as Regional Director. Their efforts initially are in the fields of inspection and control, but they expect to be in the training area after they become established. We look forward to cooperating and working with them in this phase of their work.

In an effort to make our statistical program more meaningful and helpful to our Council efforts, it was decided this year to obtain the services of qualified consultants in this field. At the present time, Price Waterhouse & Co. of Montreal are involved in this study, and they will report on their findings and recommendations early in the new year.

NEW BRUNSWICK FOREST INDUSTRIES SAFETY ASSOCIATION INC.

The Board of Directors of the New Brunswick Forest Industries Safety Association Inc., held three meetings this past year. The Officers and Directors are as follows:

KENNETH QUICK, *President*	Bathurst
T. M. POND, *Manager*	Fredericton
BURTON D. COLTER, *First Vice-President*	Fredericton
H. H. HAGERMAN, *Second Vice-President*	Fredericton
L. G. BASTIN	Montreal
V. C. BASTIN	Edmundston
LOUIS J. RICHARD	Rogersville
BRUCE THOMSON	Saint John East

DONALD WILSON	South Nelson
LAUREAT DRAPEAU	Dalhousie
J. O. E. THOMPSON	Saint John
J. L. SISK	Fredericton
JOHN FERRIS	Bathurst
H. E. BRIGGS	Fredericton

The field representatives continued throughout the year to establish and maintain personal contact with employers in the logging and sawmill industries, visiting operations and wherever opportunities made it possible, putting on courses in safety. Beginning this year, safety meetings with family groups were held in local communities where woods workers were mostly commuters and during the time and season when most of these men were home. This program was successful and will be continued and enlarged in 1968.

A total of 869 visits to employers were made, 205 visits to woods operations and 91 visits to sawmills. The staff attended and took parts in 59 meetings where 2,675 people were present. The field men conducted five Lateiner courses and numerous short sessions in which safety principles and methods were taught and discussed.

The field men held eleven Regional meetings throughout the Province and conducted twelve family group safety lectures. They conducted special training courses for the Provincial Department of Natural Resources Youth Camps, which were a combination of evening courses in safety combined with visits to the operation while these youths were doing their regular work exercises. They also took part in the annual Field Day exercises and work shops conducted by the Tree Farmer group, Canadian Forestry Association, and U.N.B. Foresters' Field Day.

The principle conferences attended by the staff were the annual conference of the Industrial Safety Council, and the annual meeting of the New Brunswick Forest Industries Safety Association Inc. on June 27 in Bathurst. The annual meeting in Bathurst consisted of group discussions and annual business in the morning with lunch at Bathurst Company Depot camp and a tour of mechanical operations in that area in the afternoon. There were 58 representatives from industry present.

In a survey conducted as a joint effort with the Vocational Training Branch of the Department of Education, Forest Products Association and the Forest Industries Safety Association, it was learned that there were over 400 wheeled skidders being operated on woods operations in New Brunswick in the fall of 1967 and a great variety of other types of mechanical equipment such as Sund machines, Tree Harvesters, various types of Forwarders, Tree felling units, Mechanical loaders, etc. and indications showed there would be an increase in number over the next two years with an estimated 550 skidders in operation by 1969.

Through the cooperative efforts of the Vocational Branch of the Department of Education, Canada Manpower, Department of Labour, New Brunswick Forest Products Association and the Forest Industries Safety Association, a new training course outline for mechanical woods operations has been drafted, and they are hopeful that training programs for workers in this industry will commence in the spring of 1968.

ACKNOWLEDGEMENTS

We wish to acknowledge the fine support and cooperation we have continued to receive from the Workmen's Compensation Board, The Department of Labour, Data Processing Centre, Audio-Visual Bureau, The Department of Justice, and other government departments. We also wish to acknowledge the cooperation and support we receive from the radio and television stations throughout the Province in broadcasting our safety messages. We are grateful for their services and guidance.

EXHIBIT "A"

NEW BRUNSWICK INDUSTRIAL SAFETY COUNCIL

BALANCE SHEET

AS OF 31st DECEMBER 1967

ASSETS

Cash in bank		$ 25,417.83
Travelling advances receivable		700.00
		$ 26,117.83

LIABILITIES

Accounts payable and accrued expenses	$ 1,696.81	
Due to Province of New Brunswick pension fund	14,186.98	$ 15,883.79
Equity:		
Balance, 1st January 1967	12,918.77	
Excess of expenditure over revenue for the year — Exhibit "B"	2,684.73	10,234.04
		$ 26,117.83

Approved on behalf of the Council

H. S. HOWCROFT

H. E. BRIGGS

Note: Office and other equipment acquired by the Council at a cost of $14,545.48 is not included in the assets above.

AUDITORS' REPORT

We have examined the balance sheet of the New Brunswick Industrial Safety Council as of 31st December, 1967, and the statement of revenue and expenditure for the year ended on that date.

We have received all the information and explanations we have required and, we report that, in our opinion, the above balance sheet and related statement of revenue and expenditure fairly present, respectively, the financial position of the Council as of 31st December, 1967, and the financial results of its operations for the year then ended, according to the best of our information, the explanations given to us and as shown by the accounting records of the Council.

REEVEY, BLACKMORE, BURNHAM, LAWS & PAGE
Chartered Accountants

Fredericton, N. B.
2nd February, 1968.

EXHIBIT "B"

NEW BRUNSWICK INDUSTRIAL SAFETY COUNCIL

STATEMENT OF REVENUE AND EXPENDITURES

FOR THE YEAR ENDED 31st DECEMBER 1967

REVENUE:		
Grants — Workmen's Compensation Board of the Province of New Brunswick		$ 201,558.00
Interest income		361.23
		201,919.23
EXPENDITURE:		
Salaries		75,270.50
Employee benefits		6,573.75
Travelling		9,197.84
Office supplies		2,443.84
Training and education		5,953.69
Conference — Net		888.17
Directors — Remuneration	$ 3,090.00	
— Expenses	2,761.93	5,851.93
Car expenses — Rental	11,762.09	
— Gas, oil	4,755.19	16,517.28
Rent and lights		3,708.56
Telephone		1,599.62
Postage		1,168.10
Insurance		208.99
Professional fees		165.00
General expenses		1,859.45
Equipment		1,654.59
Data processing		1,386.98
Promotional media		14,112.09
Total ordinary		148,560.38
Grant — New Brunswick Forest Industries Safety Association Inc.		56,043.58
		204,603.96
Excess of expenditure over revenue for the year — To Exhibit "A"		$ 2,684.73

NEW BRUNSWICK INDUSTRIAL SAFETY COUNCIL

STATISTICAL REPORT — 1967

INTRODUCTION

The following statistical report is based on information supplied to the New Brunswick Industrial Safety Council by the Workmen's Compensation Board of the province.

The report attempts to summarize and define in a concise fashion the pertinent aspects of Industrial injuries which occurred in the province during the year 1967. As in the past, the compilation of the data has required the use of estimates; where this has been necessary, the source is referred to in a footnote.

The compilation of injury statistics is normally complicated by the great volume of material available and questions of what to incorporate in a report of this nature. In such situations, the practical uses to which the data may be put are the governing factors.

Much of the material which follows in the body of the report is based on a computer oriented tabulation of each and every injury. In some cases however, a sampling procedure was used to obtain the distribution.

Direct costs which constitute a necessary part of this report do not include such costs as are attributable to administration, rehabilitation, upgraded pensions or other amounts set aside to meet unreported claims.

Various tables and charts are included to illustrate the relative severity and costs as represented by the averages for the causes, regions and nature of those injuries reported in the summary. These are referred to in tables VII, IX and X.

INDUSTRIAL INJURIES IN NEW BRUNSWICK

I. FREQUENCY OF INJURY

During the year 1967, the number of industrial injuries in the province fell to 20,693, a decrease of 411 from 1966. This compares to an increase of 502 for 1966 over the year 1965. In terms of a percentage change from the previous year, we have a 2.0% decrease in industrial injuries from 1966. The frequency of injury expressed as a ratio to assessed payroll indicates that this year all industry incurred one injury for every $17,700 of payroll; compared to last years figure of one injury for every $16,000 of payroll, and the 1965 ratio of one per $14,000. Thus, while the differences as calculated are slight, they appear to indicate that the rapid rise in the frequency of injuries of past years is showing some signs of slowing down.

Reference to table 1 affords a comparison of the frequency of industrial injuries related to the employed labour force for the years 1967 through 1964. The percentage of the employed labour force involved in injuries in 1967 at 10.9% represents a slight improvement when compared to the corresponding figures of 11.1% for the years 1966 and 1965.

TABLE I

Year	*No. of Injuries*	*Employed Labour Force (1)*	*Injury % of E. L. F.*	*Injury Rate per M. Dollars of payroll*
1967	20,693	190,000	10.9	.056
1966	21,104	190,000	11.1	.064
1965	20,602	185,000	11.1	.072
1964	19,596	177,000	11.1	.071

Footnote
(1) Estimates Department of Labour, New Brunswick

II. DIRECT COST OF INDUSTRIAL INJURIES

The direct costs of injuries sustained in the year 1967 as reported to the Council amounted to $3,752,502, an increase of 17.1% over the 1966 figure of $3,102,065. The 1967 figure represents an expenditure of $19.00 for every member of the employed labour force. This represents an increase over last year's figure of $16.00.

Table II lists the direct costs for all injuries reported in 1967 by industrial class. For purposes of comparison, the corresponding costs for 1966 are included in the table. Increases in costs occurred in five of the nine classes. Costs applicable to manufacture and sale injuries increased most — 64.8% while the Federal Government classification decreased in cost 76.7%.

TABLE II

(2) Direct costs by industrial classification for Injuries incurred in 1967.

Class	*Direct Cost in Dollars 1967*	*1966*	*Per Cent Increase (Decrease)*	*Average (3) Direct Cost by Class per Injury in Dollars*
Mining	$ 283,404	$ 215,475	2.4	271
Forestry	913,377	725,940	2.1	258
Manufacture and Sale	1,177,237	714,072	64.8	155
Construction	946,616	1,007,277	(.6)	172
Transportation	212,406	156,886	2.6	203
C.N.R.	71,429	94,771	(32.7)	148
Federal Government	42,176	74,514	(76.7)	83
Provincial Government	105,857	113,130	(6.9)	112
TOTAL:	$3,752,502	$3,102,065	20.9	184

Footnotes

(2) Direct costs do not include such items as upgrading of pensions, administration or allocations to reserve or unreported claims.

(3) Average represents the total cost for each class divided by the total number of injuries for each class.

III. SEVERITY OF INDUSTRIAL INJURIES

(Fatalities) During the year 1967, a total of 39 deaths resulting from industrial injuries were reported to the Council. This represents a marked improvement over last year's total of 47, but is 15% greater than 1965's total of 34.

The 1967 figure is highly significant when the ratio of fatalities to injuries at one in every 530 is compared to an average ratio in past years of one fatality for every 575 injuries.

The median age at death for the group was approximately 40 years and resulted in the loss of 750 working years.

TABLE III Agency Involved in Fatal Injuries — Comparison 1967/1966

Agency	*Mining*		*Forestry*		*Manufacture and Sale*		*Construction*		*Transportation*		*Other 7, 8, 9*		*Total*	
	1967	*1966*	*1967*	*1966*	*1967*	*1966*	*1967*	*1966*	*1967*	*1966*	*1967*	*1966*	*1967*	*1966*
Motor Vehicle	4	—	1	1	4	6	1	2	—	—	2	2	12	11
Motorized Equipment	—	2	1	—	—	—	2	—	5	—	1	—	9	2
Materials	1	—	1	2	1	2	—	4	1	1	—	—	4	9
Falls	2	1	—	1	1	—	1	5	—	—	—	2	4	9
Electrical Contact	—	—	—	—	2	—	1	3	—	—	—	—	3	3
Miscellaneous	—	1	—	2	2	—	3	3	1	—	1	1	7	7
Total	7	4	3	6	10	8	8	17	7	1	4	5	39*	41

* Includes 3 fatalities from previous year's injuries.

CONCLUSION

The total number of injuries reported in 1967 when compared to the same figures for the previous years appears to indicate that tangible results have accrued. The ratio of industrial injuries to the employed labour force, which constitutes one of the primary standards of evaluation, dropped from a figure of 11.1% in 1966 to approximately 10.9% this year.

Table II reports increases in costs in five of the nine classes, however, the most substantial changes were decreases of 76.7% and 32.7% which occurred in the Federal Government and CNR classes.

Table VII compares the frequency of injury by cause and class, the results of which are consistent with those of 1965 and 1964. 39.3% of all injuries resulted from workmen being struck by objects in the work area; 24% from falls and slips, and 14.4% caused by striking against objects.

Figures 3 and 4 illustrate that the nature and region of injuries in 1967 scarcely differ from patterns which have been established in past years.

SUMMARY OF CONCLUSIONS

1. There were 39 fatal injuries reported in 1967.
2. The absolute frequency rate of injuries expressed as a percentage of employed labour force for 1967 at 10.9% represents an improvement over the rate of 11.1% recorded in 1966.
3. The average injury rate in the province — .056, down from the 1966 figure of .064 per thousand dollars of payroll.
4. Increased frequency of injury in mining,manufacture and sale, construction, transportation and class 9.
5. Major causes of industrial injuries follow a pattern similar to that established in previous years.

TABLE IV COMPARISON OF NUMBER OF INJURIES — 1967-1966
(1966 Actual Number of Injuries. 1967 Breakdown By Class)

		NUMBER OF INJURIES		DIFFERENCE	
	(1)	(2)	(3)	(4)	(5)
Class	1966 (Actual)	1967 (Expected)	1967 (Actual)	(2) — (1)	(3) — (2)
Mining	1064	1000	1046	(—64)	46
Forestry	3617	4060	3545	343	(—515)
Manufacture & Sale	7727	7540	7613	(—187)	73
Construction	5933	5330	5505	(—603)	175
Transportation	785	830	1046	45	216
7	505	565	482	60	(—83)
8	580	580	508	—	(—72)
9	893	788	948	(1—105)	(+160)
Total	21,104	20,693	20,693	(—959)	—

TABLE V

CLAIMS AND COST COMPARISON

Class	1967 Injuries	1967 Cost	Prior Years Injuries	Prior Years Cost	Total All Years Injuries	Total All Years Cost
1	1,046	$ 283,404	181	$ 140,922	1,227	$ 424,326
2	3,545	913,377	789	572,572	4,334	1,485,949
3	7,613	1,177,824	1,226	472,654	8,839	1,650,478
4	5,505	946,624	958	758,742	6,463	1,705,366
5	1,046	212,412	210	117,367	1,256	329,779
7	482	71,429	107	44,608	589	116,037
8	508	41,576	115	31,744	623	73,320
9	948	105,857	152	32,055	1,100	137,912
Total	20,693	$3,752,503	3,738	$2,170,664	24,431	$5,923,167

TABLE VI AVERAGE WORKING DAYS LOST AND COST PER INJURY — CAUSE BY CLASS 1967

Cause		Class 1	2	3	4	5	7	8	9	Average
Striking against, stepping on objects	Days Lost	8.4	6.2	4.1	6.5	5.4	1.9	2.4	3.2	4.7
	Cost	$ 121	$ 94	$ 54	$ 70	$ 79	$ 42	$ 57	$ 62	$ 72
Struck by objects	Days Lost	24.7	13.9	3.9	8.7	10.6	3.5	2.9	4.8	9.1
	Cost	$ 207	$ 250	$ 100	$ 100	$ 151	$ 69	$ 43	$ 66	$ 123
Caught in, on or between	Days Lost	20.0	18.9	9.1	42.1	20.7	5.9	6.6	9.7	14.3
	Cost	$ 297	$ 240	$ 148	$ 411	$ 313	$ 161	$ 127	$ 180	$ 234
Collision or wrecks	Days Lost	1506.1	258.0	313.0	171.5	419.1	37.4	—	12.7	106.0
	Cost	$3,814	$3,405	$1,407	$1,044	$1,259	$ 844	$ 154	$ 215	$1,517
Falls and slips	Days Lost	40.4	25.8	10.7	23.7	15.7	11.1	4.2	2.9	18.0
	Cost	$ 278	$ 284	$ 346	$ 277	$ 217	$ 204	$ 109	$ 177	$ 236
Temperature extremes and explosion	Days Lost	13.6	5.5	4.3	3.1	2.4	4.7	3.8	2.6	5.0
	Cost	$ 282	$ 90	$ 68	$ 59	$ 45	$ 85	$ 53	$ 42	90.5
Inhalation	Days Lost	17.7	2.0	4.2	4.3	4.9	4.3	3.5	2.9	5.4
	Cost	$ 211	$ 55	$ 53	$ 64	$ 118	$ 73	$ 46	$ 42	$ 82
Electrical contact	Days Lost	6.0	10.6	2.0	28.4	—	—	—	—	5.8
	Cost	$ 112	$ 208	$ 35	$ 618	$ 5	—	—	—	$ 127
Over Exertion	Days Lost	97.6	13.5	16.9	10.5	7.2	14.0	4.6	11.3	20.3
	Cost	$ 248	$ 165	$ 133	$ 190	$ 108	$ 297	$ 136	$ 190	$ 183
Miscellaneous	Days Lost	679.0	51.1	32.8	66.3	69.5	18.6	4.3	10.5	45.0
	Cost	$ 779	$ 126	$ 336	$ 742	$ 559	$ 487	$ 276	$ 211	$ 581
All Causes	Days Lost	49.9	23.8	12.7	22.8	31.4	9.2	3.7	7.8	20.0
	Cost	$ 346	$ 343	$ 187	$ 264	$ 263	$ 197	$ 118	$ 125	$ 230

TABLE VII — NUMBER OF INJURIES — CAUSE BY CLASS

Cause	1 No.	1 %	2 No.	2 %	3 No.	3 %	4 No.	4 %	5 No.	5 %	7 No.	7 %	8 No.	8 %	9 No.	9 %	Total No.	Total %
Striking Against and Stepping on	108	10.3	286	8.1	1,462	19.2	777	14.1	91	8.7	61	12.7	61	12.0	139	14.7	2,985	14.4
Struck by	411	39.3	1,925	54.3	2.565	33.6	2,096	38.1	395	37.8	173	35.9	127	25.0	336	35.5	8,028	38.8
Caught in, on, or between	109	10.4	257	7.2	723	9.5	320	6.8	78	7.5	57	11.8	25	4.9	58	6.1	1,627	7.9
Collisions and Wrecks	12	1.2	27	.8	61	.8	40	.7	30	2.9	13	2.7	3	.6	16	1.7	203	1.0
Falls and Slips	251	24.0	751	21.2	1,518	19.7	1,446	26.3	334	31.9	115	23.9	180	35.4	237	25.0	4,832	23.5
Temperature Extremes, Explosions	43	4.1	57	1.6	387	.5	343	6.2	17	1.6	13	2.7	21	4.1	29	3.1	910	4.4
Inhalation and Industrial Disease	40	3.8	56	1.6	188	.2	91	1.6	16	1.5	7	1.5	10	2.0	17	1.8	425	2.0
Contact with Electric Current	2	.2	6	.1	22	.1	28	.1	2	.1	—	—	—	—	—	—	60	.1
Over Exertion	67	6.4	170	4.8	631	8.3	325	5.9	77	7.6	39	8.1	55	10.8	83	8.7	1,447	7.0
Miscellaneous	3	.3	10	.3	56	.1	39	.2	6	.4	4	.7	26	5.2	32	3.4	176	.9
Total	1,046		3,545		7,613		5,505		1,046		482		508		947		20,693	

TABLE VIII — AVERAGE DAYS LOST AND COST PER INJURY BY NATURE, BY CLASS — 1967

Nature		Class 1	2	3	4	5	7	8	9	Average
Amputations	Days Lost	98.5	120.9	82.9	708.8	57.3	37.3	49	1	144.0
	Cost	$1,519	$1,330	$1,672	$5,542	$1,659	$1,459	$1,381	$ 706	$1,908
Scalds	Days Lost	12.6	5.8	3.5	7.4	12.9	7.2	5.4	7.7	8.0
	Cost	$ 272	$ 111	$ 56	$ 140	$ 429	$ 132	$ 67	$ 98	$ 163
Cuts	Days Lost	9.1	9.9	4.3	5.7	6.7	2.1	2.1	4.8	6.0
	Cost	$ 134	$ 135	$ 81	$ 86	$ 89	$ 47	$ 41	$ 72	$ 85
Sprains	Days Lost	11.9	16.1	7.3	11.0	11.4	8.6	4.4	11.0	10.0
	Cost	$ 173	$ 209	$ 178	$ 183	$ 164	$ 162	$ 126	$ 167	$ 170
Fractures	Days Lost	154.1	58.2	37.3	63.9	96.5	28.7	9.9	20.9	59.0
	Cost	$ 809	$1,058	$ 801	$ 663	$ 688	$ 537	$ 169	$ 264	$ 624
Eyes	Days Lost	3.9	6.5	.6	2.9	.5	.8	.5	.4	2.0
	Cost	$ 81	$ 97	$ 19	$ 44	$ 16	$ 29	$ 17	$ 15	$ 40
Hernia	Days Lost	21.6	38.9	36.0	36.9	41.5	37.6	8.4	42.9	33.0
	Cost	$ 343	$ 695	$ 643	$ 761	$ 711	$ 912	$ 352	$ 867	$ 661
Occupational Disease	Days Lost	62.5	—	9.5	15.8	4.6	25.	8.7	8.5	17.0
	Cost	$ 638	—	$ 78	$ 180	$ 68	$ 373	$ 104	$ 112	$ 194
N. E. C.	Days Lost	485.3	40.9	56.3	31.6	76.2	—	.3	1.3	86.0
	Cost	$1,189	$ 336	$ 238	$ 169	$ 309	$ 37	$ 2	$ 46	$ 291
All Natures	Days Lost	49.9	23.8	12.7	22.8	31.4	9.2	3.7	7.8	20.0
	Cost	$ 346	$ 343	$ 187	$ 264	$ 263	$ 197	$ 118	$ 125	$ 230

TABLE IX

AVERAGE DAYS LOST AND COST PER INJURY BY REGION AND CLASS — 1967

Region		*Class* 1	2	3	4	5	7	8	9	*Average*
Eye	Days Lost	3.9	6.5	.6	2.9	.2	.8	.5	.4	2.3
	Cost	$ 81	$ 97	$ 19	$ 44	$ 16	$ 29	$ 167	$ 15	$ 41
Other Upper Extremities	Days Lost	10.7	17.3	6.2	15.1	14.2	5.9	3.2	8.9	15.5
	Cost	$ 193	$ 211	$ 756	$ 302	$ 236	$ 101	$ 59	$ 120	$ 173
Ear	Days Lost	—	9.5	—	1.5	3.0	—	—	—	2.4
	Cost	$ 8	$ 161	$ 14	$ 3	$ 27	$ 13	$ 10	—	$ 47
Feet	Days Lost	15.9	16.6	7.9	10.8	19.6	6.5	6.9	10.2	11.5
	Cost	$ 218	$ 204	$ 397	$ 162	$ 242	$ 105	$ 95	$ 162	$ 249
Head and Neck	Days Lost	93.3	45.3	6.1	27.1	4.5	.4	—	3.5	24.2
	Cost	$ 227	$ 677	$ 406	$ 153	$ 86	$ 31	$ 31	$ 63	$ 324
Toes	Days Lost	13.2	17.8	6.1	7.9	11.6	4.0	3.8	7.6	9.1
	Cost	$ 169	$ 221	$ 80	$ 112	$ 120	$ 70	$ 6	$ 120	$ 120
Back	Days Lost	12.3	18.0	8.7	13.4	10.0	11.6	4.6	12.1	11.7
	Cost	$ 166	$ 275	$ 288	$ 235	$ 140	$ 208	$ 160	$ 187	$ 243
Other Lower Extremities	Days Lost	16.3	16.6	9.7	13.3	21.6	14.9	3.5	9.9	13.4
	Cost	$1,238	$ 241	$ 145	$ 238	$ 331	$ 371	$ 88	$ 150	$ 210
Chest	Days Lost	11.2	9.9	4.5	7.9	10.8	16.2	1.2	8.2	7.8
	Cost	$ 137	$ 111	$ 54	$ 115	$ 141	$ 337	$ 25	$ 95	$ 100
Internal Injuries	Days Lost	727.8	98.3	232.0	189.0	394.0	38.3	10.3	11.2	238.0
	Cost	$2,297	$ 736	$ 113	$1,226	$1,159	$ 694	$ 184	$ 194	$1,126
Trunk	Days Lost	10.5	16.7	16.1	16.9	13.3	17.2	3.5	21.7	15.9
	Cost	$1,567	$ 297	$ 273	$ 347	$ 219	$ 386	$ 151	$ 399	$ 298
Miscellaneous	Days Lost	.2	.3	—	—	—	—	—	—	.2
	Cost	$ 39	$ 33	$ 24	$ 268	$ 27	$ 20	$ 18	$ 20	$ 27
Hands	Days Lost	3.4	11.8	5.3	9.5	14.3	5.5	2.5	5.6	7.9
	Cost	$ 175	$ 450	$ 63	$ 108	$ 174	$ 101	$ 48	$ 75	$ 142
Fingers	Days Lost	15.3	15.8	6.6	9	12.2	3.9	5.1	5.8	8.8
	Cost	$ 225	$ 192	$ 94	$ 123	$ 179	$ 103	$ 101	$ 74	$ 121
All Regions	Days Lost	49.9	23.8	12.7	22.8	31.4	9.2	3.7	7.8	20.0
	Cost	$ 346	$ 343	$ 187	$ 264	$ 263	$ 197	$ 118	$ 125	$ 230

FIGURE 1

Distribution of Industrial Injuries 1965, 1966 and 1967 by Class Expressed as a Percentage of All Injuries.

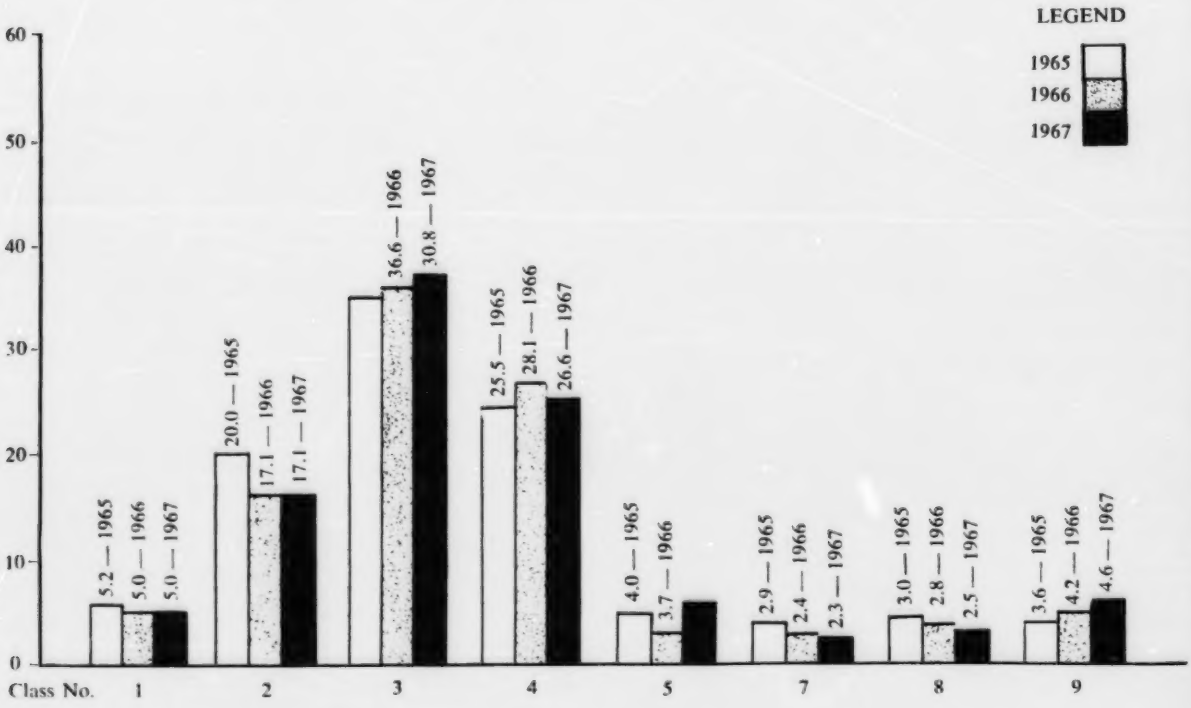

FIGURE 2

Causes of Injury Expressed as a Percentage of Total.

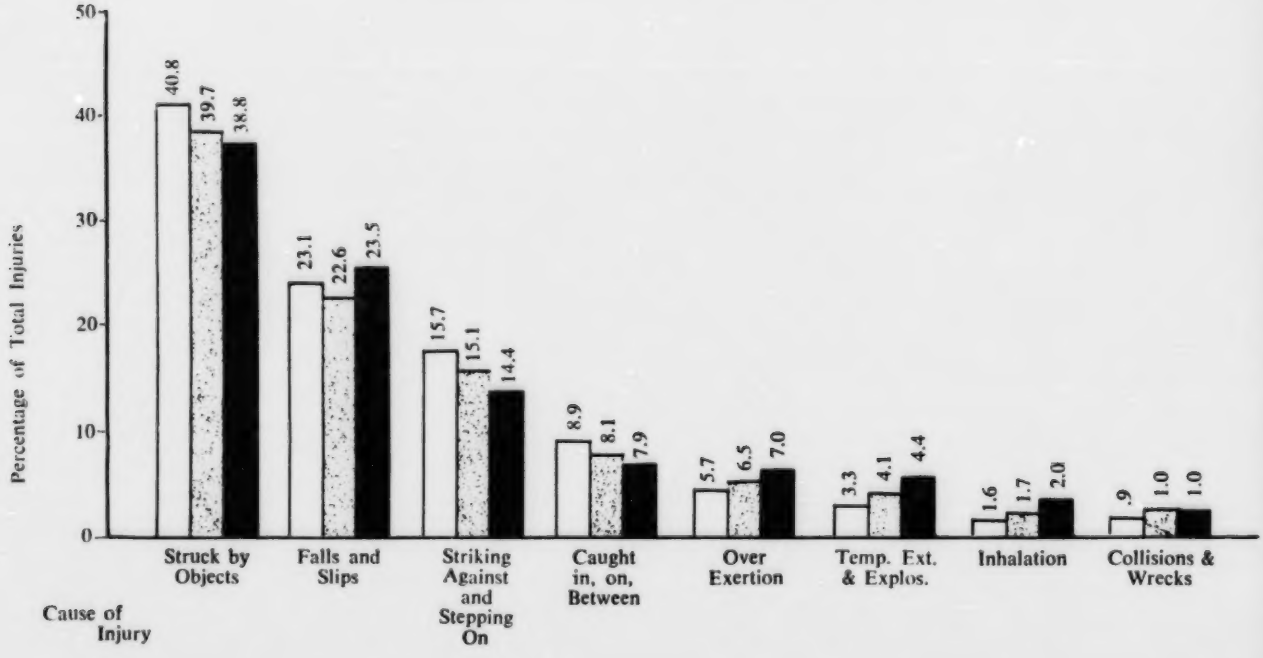

FIGURE 3

Nature of Injury Expressed as a Percentage of All Injuries
1965, 1966, 1967

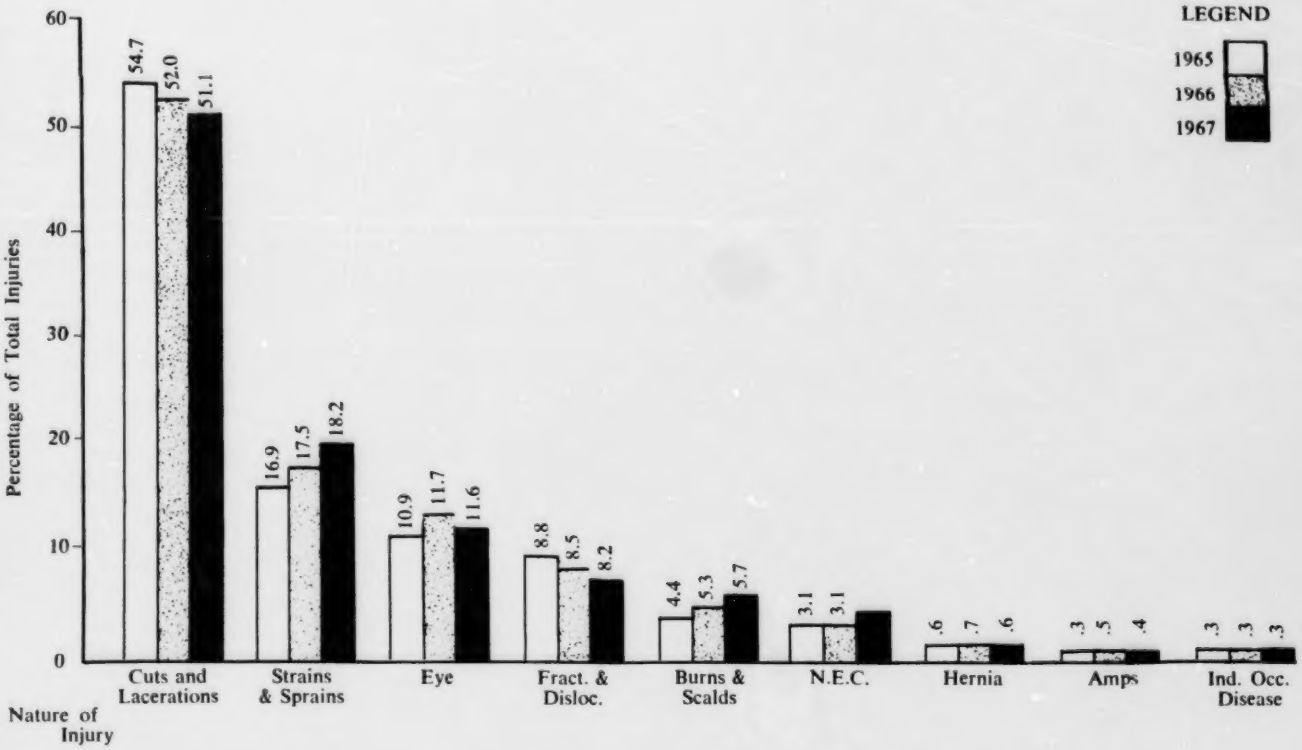

FIGURE 4

Region of Injury Expressed as a Percentage of All Injuries
1965, 1966, 1967